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THE OHIO STATE UNIVERSITY'S APPROACH TO RURAL FINANCIAL MARKETS: A CONCEPTS PAPER

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OUTLINE

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Introduction

The Ohio State University (OSU) is recognized as the world's center for the analysis of rural financial markets (RFMs) in low income countries (LICs) and for the design of related programs and policies. This recognition results from research and technical assistance efforts by OSU faculty and students in several dozen LICs over more than two decades. With steady support from the Agency for International Development (AID), OSU has challenged the assumptions of traditional RFM programs, has influenced the policies of donor agencies and LIC governments, and has developed a new conceptual framework for the understanding and promotion of RFM activities. OSU has focused on the importance of mobilizing rural financial savings for both depositors and intermediaries, on the nature and magnitude of transaction costs and on the need for cost-reducing technologies in RFMs, and on the limitations of using concessionary interest rates in attempts to promote investment, speed technological change, or assist the poor.

This paper presents a brief description of the development of OSU's conceptual framework and a summary of the lessons learned

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* This paper incorporates contributions by Dale W Adams, Douglas H. Graham, and Richard L. Meyer.

through extensive field research and institutional experiments. It also describes OSU's successful model for technical assistance, institution building, and policy dialogue, and it briefly examines the main results from recent activities in Honduras, the Dominican Republic, Bangladesh, and Niger under OSU's Cooperative Agreement with AID. Finally, the paper discusses promising avenues for future research and experimentation and makes suggestions about AID's role.

Role of Financial Services

The important contributions of finance to economic development have been increasingly recognized. The OSU approach to RFMs has matured in parallel with the new views on finance and development pioneered by Shaw and McKinnon. Both approaches share a common perspective about the basic functions of financial processes and about the negative impacts of policies that repress financial markets. While the Shaw-McKinnon school focuses on macroeconomic stabilization and financial liberalization, OSU emphasizes the special problems of providing rural financial services, including the mobilization of deposits, the impossibility of using cheap credit to help the poor, and the importance of transaction costs. OSU has contributed new insights about the impact of policies and regulations on the microeconomic behavior of RFM participants and about the design of programs, institutions, and technologies for the improvement of RFMs, to complement aggregate financial reforms.

OSU's views have stressed the link between the efficient provision of financial services and economic growth. First, the monetization of the economy (i.e., the provision of the services of a means of payments) is essential for the integration of commodity and factor markets. Money reduces the costs of conducting transactions, increasing the flow of trade and enlarging the size of markets, and improving the productivity of resources through specialization, the division of labor, greater competition, and the exploitation of economies of scale and uses of modern technologies. The importance of promoting monetization depends on the stage of each country's development. In the rudimentary financial markets of Africa, monetization is a continuing need, further linking subsistence farm-households to national markets. On the other hand, in Latin America and Asia, the efficiency of money may be reduced by hyperinflation and currency substitution, thus calling attention to the importance of macroeconomic policies.

Second, financial intermediation increases the rate of capital accumulation and improves resource allocation. In the absence of finance, producers are forced to take advantage of opportunities only to the extent allowed by their own resources, while others may be forced to use their marginal resources in inferior opportunities. There is no reason to expect that, at the same moment, those with a capacity to save are necessarily those with the best investment opportunities. By making the division of labor between savers and investors possible, financial intermediaries channel resources from producers and regions with a limited growth potential and poor productive opportunities to those where a more rapid expansion of output is possible. Intermediaries offer depositors new forms of holding wealth that may be more attractive than marginal uses within the firm-household, thus increasing incomes and eliminating inferior uses of resources. At the same time, intermediaries transfer claims on resources to borrowers, who possess productive opportunities that otherwise would be unexploited. Thus, the financial system offers valuable services and income-increasing opportunities to both depositors and borrowers. However, many credit programs and institutions rely heavily upon external donor funds, are thus borrower-dominated, and ignore the demand for deposit services. OSU has highlighted the welfare-increasing impact of deposit mobilization, which is also crucial for strengthening intermediaries.

Third, the financial system facilitates management of liquidity, risk, and reserves. The lack of synchronization between expenditures and receipts, so acute in agriculture, makes the management of cash flows expensive. Most farmers also need to accumulate stores of value for emergencies or to take advantage of future investment opportunities. In the absence of attractive domestic financial assets, farm-households are forced to hold foreign currencies, land, and other tangible assets (gold, animals, inventories of crops or inputs, etc.) that yield low social returns. Non-financial stores of value and inflation-hedges usually imply high risks and transaction costs, too. Livestock and inventories are subject to theft, disease, and depreciation, while inflation and financial repression shift portfolio composition away from domestic financial assets. Efficient financial institutions reduce the costs and risks of holding precautionary and speculative reserves, by offering both attractive deposit opportunities, for safe reserve accumulation, and future lines of credit to cope with emergencies, thus reducing the size of desired reserves and releasing tangible resources for production.

Finally, the financial system provides fiscal support for the public sector and contributes to the management of foreign exchange. Abuses of the fiscal function, however, result in inflation, devaluation, and the crowding out of productive activities from credit portfolios, jeopardizing the provision of monetization, intermediation, and reserve-management services. The system becomes a fiscal instrument to tax resources away from depositors rather than an intermediary between private savers and investors.

Market fragmentation, transactions of small size, high information costs, and substantial risks and uncertainty cause high transaction costs in LIC financial markets. As a result, the net returns to savers are low, the total costs of funds (including non-interest expenses) for borrowers are high, the size of financial markets is small, and the volume of funds mobilized and the variety of financial services provided are limited. Moreover, since transaction costs are much higher in rural than in urban areas, financial activities tend to be concentrated in the cities. Financial policies and regulations, including interest-rate restrictions and prejudices against informal lenders, have accentuated this urban bias and concentrated cheap loans in a few hands. Only a small proportion of the rural population has had access to formal credit, from incomplete, non-viable institutions, ready to offer loans but not deposit facilities. The funds have come from governments, central banks, and donors, while limited intermediation between local savers and investors has perpetuated large discrepancies in the marginal rates of return on rural investments.

In summary, financial services matter because they integrate markets, provide incentives for savings and investment, encourage the holding of larger proportions of wealth in the form of domestic financial assets, rather than unproductive inflation hedges or foreign assets, and channel resources away from inferior uses toward higher-return investments. Financial progress results from the reduction of risks and transaction costs, through the exploitation of economies of scale and of scope, the accumulation of information, the introduction of cost-reducing financial technologies, and the establishment of bank-customer relationships. In primitive economies this may involve overcoming small market size, reducing imperfections and fragmentation, and circumventing the restrictions imposed by limited education, lack of infrastructure, and low incomes. In more advanced economies, greater attention has to be devoted to the reform of repressive policies and regulations in order to achieve the optimum size, composition, and performance of the financial system.

Development of the OSU Approach Towards RFMs

Farm interviews in Colombia, Peru, Ecuador, and Brazil in the 1960s provided OSU with an understanding of the importance of formal and informal finance and of the severity of the deficiencies of traditional agricultural credit programs. OSU began to question the view that most informal lenders extract large monopoly profits and that rural producers do not save. OSU research in Taiwan and South Korea in the early 1970s showed the existence of substantial small-farmer voluntary savings and the need for appropriate policies for their mobilization. For five years, OSU focused its research on the massive agricultural-credit programs of the 1970s in Brazil, where subsidized loans became the leading edge of rural development efforts. OSU discovered that underpriced loans were concentrated in the hands of the non-poor, worsening income distribution, and the extent to which this cheap credit was diverted to other uses or was leaking out of the agricultural sector altogether. These results, confirmed by research in Costa Rica and elsewhere, called into question the feasibility of using subsidized credit to stimulate technological change and assist the rural poor. Rather, attractive product and input prices and promising yields emerged as be more powerful incentives for the adoption of innovations. Moreover, due to the fungible nature of finance, serious methodological problems became evident in attempts to measure the alleged impact of credit use at the borrower level, similar to the problems encountered in attempts to target loans.

In the early 1970s, OSU encouraged other researchers to work on the emerging problems of RFMs and helped to design and conduct AID's worldwide Spring Review of Small Farmer Credit. This review included both 10 workshops, attended by over 2,000 people, and the preparation of about 80 papers. This literature became a primary citation for those working on RFMs and showed that the problems identified earlier by OSU existed in many LICs. Through the years, OSU developed an informal network of scholars and policymakers around the world who have been interested in improving the functioning of RFMs. Prompted by OSU's work, the World Bank, the Food and Agriculture Organization, and the Interamerican Development Bank also increased their interest in RFM performance.

In the late 1970s, additional OSU research in Jamaica, Costa Rica, Peru, Bolivia, the Philippines, and Thailand focused on the supply (rather than the demand) side of RFMs, financial market performance, and institutional behavior. It was argued that substantial policy changes were needed to increase the contribution of RFMs to growth and equity. While stressing the need to build strong and resilient financial systems, OSU showed that traditional credit policies were undermining rural development. Recommended policy changes included less loan targeting, more savings mobilization, positive and uniform real rates of interest, less use of credit programs to compensate for other price disincentives, and new ways to evaluate financial projects. These efforts culminated in 1981 with a Colloquium in Washington, D.C., co-sponsored by AID and the World Bank, and the publication of two policy-oriented books.

Background of the AID-OSU Cooperative Agreement

By the early 1980s, several of OSU's views and recommendations, in particular those highlighting the influence of financial and non-financial policies on the performance of RFMs, were achieving wider acceptance. These ideas provided the background for a new Cooperative Agreement with AID. OSU stressed how the economic environment and the policies that influence the level and variability of rural profits and of debt-repayment capacity are crucial for the strength and growth of rural financial institutions. Farmers who receive low output prices or pay high input prices, obtain poor and unstable yields, and have limited access to markets and public services cannot become good bank clients: they will be less willing to borrow and repay loans, and they will be less able to save and place surplus funds in financial intermediaries.

While emphasizing the need for technological innovations and correct price and foreign-exchange policies, OSU showed that credit interventions cannot correct for the negative impact of other policies or compensate for low returns from rural investments. Subsidized loans are neither an efficient nor an equitable instrument to reduce the urban bias of price policies. Subsidized loans do not make unprofitable investments profitable. Credit does not make the required inputs available; it does not build nonexistent roads, bridges, or storage facilities; it does not create missing markets or reduce yield variability. Moreover, while all farmers are harmed by repressive price policies, only a handful obtain compensatory loans, and these may not modify their investment decisions, given the fungibility of funds. On the other hand, much larger numbers of farm-households could increase their incomes and share in the profits generated elsewhere, if they could earn attractive returns on their bank deposits. Thus, while identifying the regressive impact of credit subsidies on income distribution, OSU emphasized the potential benefits for the rural population from increased access to attractive deposit opportunities.

Similarly, OSU called attention to the negative impact of policies that reduce the degrees of freedom, impose inconsistent or impossible tasks on financial intermediaries, and severely constrain their profits. As a result of these policies, many types of financial institutions either fail or are only moderately successful, depending on the degree of financial repression observed. In these circumstances, it is not sufficient to promote a particular kind of institution.

While emphasizing the crucial influence of aggregate financial policies, OSU also identified the deficiencies of particular institutional types. The reduced scope of specialized agricultural-credit agencies and the limited opportunities to diversify their assets substantially increase the risk in their portfolios. Borrower-dominated institutions lack incentives to collect loans and operate under interest-rate structures that reduce their viability. Institutions that do not mobilize deposits from the public lose information about potential clients, while the public-sector sources of their funds restrict their flexibility and profitability. Constrained by interest-rate ceilings, many intermediaries find it difficult to cover the costs and risks of mobilizing deposits in rural areas and of granting credit to marginal clientele. Those that offer depository services, however, grow more rapidly, are more stable, and recover their loans more easily.

OSU's current Cooperative Agreement stresses deposit mobilization as an attractive focus for new policies and actions aimed at expanding the access of the rural population to <u>all</u> financial services. This dimension of financial intermediation presentes considerable scope for innovation, since many more firms and households can be served through deposit facilities than through credit. There is a continuous demand for safe and convenient means to manage liquid funds, and deposits provide an entry point into formal finance largely under the client's control. On the other hand, while small, short-term loans are usually provided by informal credit sources at low transaction costs, institutional loans are demanded in response to special opportunities and require credit-worthiness. A deposit connection with the intermediary may facilitate the eventual access to loans, by providing information to the lender, creating a basis for mutual trust, and facilitating the accumulation of a downpayment (the deposit). The Cooperative Agreement, therefore, emphasizes pilot deposit-mobilization experiments as an important step toward RFM development. Out of recent OSU work several new lessons have been learned.

Record and Problems of Deposit Mobilization

Recent experiences in the Dominican Republic, Honduras, and Bangladesh have confirmed the existence of a strong demand for rural deposit facilities and that financial savings can be attracted with appropriate incentives. In the Dominican Republic, about 21,000 accounts and US $2.5 million were mobilized by Banco Agricola in the first year of operation of this new service, even under adverse economic circumstances. The promotion of deposit mobilization by credit unions has been similarly successful in this country and in Honduras. The rapid, voluntary growth of numerous small accounts has revealed a preference for this form of asset holding which underscores the value of deposit services for small rural households. The reduction of transaction costs for depositors, particularly in remote areas where these services had not been previously available, has been an important inducement, in addition to interest-rate reforms, lotteries, and the expectation of future loans.

Agricultural development banks with an established network of branches have been able to mobilize deposits at a relatively low marginal cost, but the activity is expensive when the infrastructure has to be created. OSU has discovered that, in any case, deposit mobilization is not easy. A gestation period of complex preparation is frequently necessary. The management and staff of the bank (or the membership of the credit union) need to be convinced that the efforts are both desirable and feasible. The myth that the rural population does not possess assets that may be transformed into deposits and does not have a margin over consumption for further accumulation needs to be questioned. Evidence has to be provided to show that potential depositors respond to higher returns, to lower transaction costs, to greater liquidity and security, and to other economic incentives. The institution's management must understand the problems associated with subsidized credit, high default rates, and dependence on outside financing if internal opposition is to be eliminated. OSU's technical assistance has played a key role in bringing about this understanding of the need for, and benefits from, deposit mobilization.

Similarly, political support for institutional and policy reforms must be obtained from the domestic authorities and the foreign donors. OSU has played an important role in initiating thinking about the need for financial reform, while promoting substantial local involvement in the process. In the Dominican Republic, for example, a combination of public discussion over the years, research by Dominicans, in-depth policy dialogue, and operational innovations on a pilot basis, supported and encouraged by flexible AID-sponsored technical assistance, has been a powerful yet subtle force for change.

Deposit mobilization, moreover, usually forces the intermediary to deal with "second-generation" problems and face new dilemmas about managerial strategy and organization. New data processing needs, liquidity-management requirements, portfolio choice and loan-collection options have to be dealt with. At the same time, as the institution becomes less "borrower-dominated", new challenges appear. Branch managers must quickly convert mobilized funds into loans, but must also find borrowers with a high probability of repayment. A less borrower-dominated environment induces stricter loan-evaluation procedures, more aggressive loan-recovery practices, and greater concern about the pricing of loans to cover depositor returns and operational costs. At the same time, given the growth of loanable funds, delinquent borrowers have an incentive to repay in order to gain access to a continuing stream of future loans. Rapid and drastic changes in bank and credit union behavior have been observed both in Honduras and the Dominican Republic. Given the new awareness about profitability, the intermediaries have revised their interest-rate structures and have attempted to reduce their operational costs. This has brought about changes in institutional structure, managerial policies, and administrative procedures, and has raised fundamental questions about national financial regulations. In the experiments conducted under the Cooperative Agreement, all of these changes have increased institutional viability and efficiency.

Towards A General Systems Approach to RFMs

Over the years, a new approach to the analysis and development of RFMs has evolved from OSU's work. The trend has been to move away from partial views and actions towards a general-equilibrium, system-wide perspective. Thus, rather than evaluating the farm-level impact of isolated credit projects, OSU has promoted a systems approach to assessing the performance of RFMs. While traditionally the emphasis had been on projects, OSU stresses markets. While traditionally the emphasis has been on loans, OSU recognizes the importance of several types of financial services and attempts to redress the neglect of deposit mobilization. While traditionally evaluation centered (unsuccessfully) on the alleged farm-level impact of transitory subsidized loans, OSU has insisted on the need to create complete, permanent, and viable institutions. What matters is the cost, quality, and permanence of the financial services offered. While traditionally credit programs have been targeted toward specific groups and loans for particular uses, OSU recognizes that a viable financial institution must diversify its portfolio and smooth its flows of funds over time by serving numerous and diverse rural populations, in order to reduce risks and manage liquidity. Recognizing the fungibility of funds, OSU has contrasted the limited success of end-use targeting with the high transaction costs it imposes on financial market participants. Moreover, to compete successfully, institutional intermediaries must avoid artificial distinctions about uses of funds and must provide a reliable, flexible set of services. Economies of scale and of scope can be substantial for financial market participants. While traditional views emphasized the need to keep interest rates low, OSU insists that what matters is the total cost of funds to borrowers, the net return on deposits to savers, and the financial survival of intermediaries.

Transaction costs have come to occupy a central position in OSU's analysis. Their reduction constitutes the main mechanism of financial progress, and their magnitude the most important indicator of the degree of efficiency of RFMs. The methodologies to measure transaction costs first tested by OSU in Jamaica and Honduras and later applied in Costa Rica, the Dominican Republic, Panama, Peru, Ecuador and several other countries have shown that all of the components of the total transaction costs of financial activities in the rural areas of LICs are substantial. They also are highly dispersed, signaling major market fragmentation. Given their inverse relationship with loan size, these transaction costs are highly regressive, excluding many potential small depositors and borrowers from market participation. OSU has shown that a substantial portion of operational lending costs results from the loan targeting usually required by donors, reflecting the screening, documentation, supervision, and extensive reporting requirements associated with a multitude of separate special lines of credit. Other research has shown that interest rate restrictions increase borrowing costs, through the implicit pricing that results from the rationing behavior of lenders attempting to clear the market. As a result, low interest-rate loans are not necessarily cheap for the borrowers and, given their regressivity, may not even reach the small and poor farmers. Thus, raising interest rates may have a progressive impact, transmitting a greater relative increase in the total cost of funds to large borrowers than to small clients.

Obstacles to the Expansion of Rural Financial Services

The provision of financial services is a difficult and expensive task, but it can play a key role in promoting the development and welfare of the rural areas. The special nature of rural economies explains part of the difficulties. Potential depositors and borrowers are very heterogeneous and geographically dispersed, their financial transactions are numerous and small, and they encounter high risks. The resulting high transaction costs reduce both the demand for and supply of financial services. Potential depositors find that transaction costs reduce the net returns on financial savings, while potential borrowers find that the costs of loans are high when non-interest transaction expenses are added. Lenders perceive the costs of managing numerous small savings accounts and determining the creditworthiness of small, diverse producers to be high, given the scarcity of information and the nature of the risks involved.

Economic policies that repress rural incomes and increase their variability further constrain deposit and loan demand and reduce creditworthiness. At the same time, rigid and inappropriate financial policies contract the supply of financial services, reduce the profitability of servicing rural clientele, and force intermediaries to evade the impact of regulations by withdrawing from the countryside. The limited scope of specialized credit institutions, created solely for the disbursement of agricultural loans, on concessionary terms, for narrowly defined target populations, has reduced their viability. They have been incomplete intermediaries that neglect deposit mobilization, experience high default rates, impose high transaction costs on their target clientele, and lack viability.

Over the years, OSU has dealt with several of these obstacles to an expanded supply of rural financial services. In the 1970s emphasis was placed on the role of policies. While insisting on the overall need to modify price and other non-financial policies, OSU concentrated attention on the importance of financial reforms, especially a revision of interest-rate policies. These efforts culminated in the 1981 Colloquium and a generalized acceptance of the desirability of positive, more uniform real rates of interest, a recommendation that any agricultural credit practitioner immediately associates with OSU.

The more recent Cooperative Agreement, however, provided OSU with the opportunity to go well beyond this. The existence of rural demand for deposits was corroborated and the superior performance of complete intermediaries which mobilize deposits was demonstrated. The recent successes have also suggested new areas of concern and have revealed the extent of the task still to be completed. The challenge of the "second-generation" problems of deposit mobilization is only now being met, as it has become clear that only new cost-reducing technologies will make the supply of financial services in the rural areas more efficient. The nature of these technologies will depend on the stage of development and degree of market integration of each country. These new technologies include the development of a physical infrastructure (branches, mobile units, microcomputers), new deposit instruments, new institutional designs and organization. An appropriate division of labor and efficient linkages among several types of intermediaries must be developed.

The Role of AID in Future RFM Activities

Over the years, with substantial AID support, OSU has developed a new conceptual framework for the understanding of RFMs, has convinced donors and LIC governments to conduct experiments and modify policies and institutions, and has provided the field research, technical assistance, and policy dialogue required for an improved supply of rural finance. Recent progress and success of OSU projects, moreover, has revealed the complexity of the task and the nature of the ingredients yet to be added. The AID-OSU partnership is in a unique position to contribute to the remaining components of this market-building process.

The AID-OSU comparative advantages in this field are evident. AID is operating in many countries, particularly in those with major rural-development problems, on a long-term basis. The missions know the political environment well and provide the continuity and sensitivity for a successful policy-dialogue and institution-building process. AID has shown more inclination than other donors to sponsor high-risk experiments, innovations, and pilot projects. Comparatively, it has placed more emphasis on technical assistance than on outright capital transfers. OSU has not only developed a solid and operational conceptual framework, but it has also accumulated the considerable field experience required for dealing with the "second-generation" problems at the microeconomic level and for the development and adaptation to local environments and institutions of new financial technologies. OSU's modalities of technical assistance and policy dialogue not only have been well adapted to the needs of AID missions, but have recently been extremely successful, as a result of sustained efforts over many years. OSU associates and alumni in prominent LIC positions are increasingly encouraging RFM reforms. Close collaboration with local researchers and institutions has resulted in a very effective transfer of techniques of analysis and of implementation strategies extremely important for institution building.

Recognition of the crucial importance of an efficient supply of financial services has led the World Bank and the International Monetary Fund to promote aggregate financial-market reforms in many LICs, as part of their stabilization programs and structural-adjustment loans. The complexity of these exercises and the inclination of these donors have led them to frequently ignore the special problems and needs of RFMs. By treating the financial system as a "black box," they have frequently downplayed the practical problems of creating viable institutions. This neglect accentuates the urban bias of financial development and perpetuates the limited degree of access of the rural population to financial services. The "black-box" needs to be examined and the technologies created, if these services are going to be expanded. OSU has urged policymakers not to bypass RFMs and to meet the additional challenges posed by their development. Only sustained field work, detailed technical assistance, and microeconomic experimentation --not typical of other donors-- will provide the answers to this challenge. AID possesses clear comparative advantages to meet this need.

Future AID work on RFMs must combine three crucially interrelated elements. First, an appropriate policy and regulatory environment has to be created. The lessons learned by OSU in the field represent a key catalyst for this policy dialogue. Second, new cost-reducing innovations have to be designed, tested, and adapted to local circumstances. OSU's recent experiments suggest the scope and sources of successful financial technologies. Third, viable institutions have to be created. A mechanism for the transfer of an analytical framework for successful policy and management decisions is a crucial component of institution building.

If the policy environment is not hospitable, financial intermediaries will not survive. Positive real rates of interest on loans and deposits and non-preferential rates of interest for Central Bank rediscounting, low and uniform reserve requirements, and limited targeting are among the most basic policy goals. OSU has learned that local experiments and research are a powerful tools for bringing about these policy reforms.

Appropriate policies, however, are not a sufficient condition for the expansion of RFMs. Given the magnitude and dispersion of transaction costs in LICs, new production functions of rural financial services will be required. Only lower-cost technologies for deposit and loan activities will make rural intermediaries viable and will increase access to rural finance. Very little work has been done, however, on the technology of financial services, probably because the payoffs were limited given financial repression. As aggregate financial reforms provide the appropriate incentives, however, new technologies will be needed to take advantage of socially profitable opportunities for expanding RFMs and to guarantee the viability and permanence of rural financial institutions. New technologies are also needed to substantially reduce uncertainty and facilitate management of the remaining risk. These technologies can only be developed through field testing, contrasting, experiences, and experimentation.

Moreover, institutional and technological innovations will have to be adapted to the particular market size and degree of market integration and to the country's stage of development. Appropriate financial technologies are essential for economizing the use of resources in the operation of financial institutions and to reduce transaction costs. What is appropriate, will depend on the resourses available and the economic environment. While in Lating America policies may be emphasized, institution building is crucial in Africa.

Furthermore, an efficient division of labor between formal and informal intermediaries and among institutional types (public development banks, private rural banks, and credit unions) is required, complemented by the development of cost-efficient linkages (at the wholesale and retail levels) to guarantee the smooth operation of the whole system. Technologies, institution building, and policy reforms will reinforce each other. Substantial efforts will be required, however, to implement the needed policy reforms, create viable institutions, and accelerate cost-reducing technological change in RFMs. With AID support, OSU can extend the successful models that it has recently developed to new countries, new institutions, and new sectors of the economy, to make financial markets work more efficiently and equitably.

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